

# Capitola tries ersatz seaweed to save cliffs

By BOB SMITH

Despite warnings that \$120,000 in artificial seaweed, Capitola's hopes for stabilizing its crumbling cliffs, could be swept away in the first winter storms, the Capitola City Council decided to go ahead with the experimental project.

The council told City Manager Steve Burrell to go ahead with the seaweed installation in front of the Grand Avenue cliffs. Burrell said the target date for the completed installation is June 1, but councilmembers asked him to move the date up, if possible, to capture greater amounts of sand.

The warning that the scheme might not work came Thursday night from Assistant Planner Susan Tupper who had been assigned to review the proposal.

"The idea of plastic seaweed is very intriguing," she told the council.

"The conclusion that I have come to is that the seaweed would probably work.

"The question is how long it will stay there," Tupper said.

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Photo by Bob Smith

Assistant Capitola Planner Susan Tupper holds a section of the artificial seaweed that will be "planted" off front of the Grand Avenue cliffs.

# Seaweed

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Tupper warned that the artificial seaweed could be ripped out of its beds and scattered along the coastline each winter, necessitating a costly "replanting" of the plastic material each spring.

The city has been studying the idea of using the artificial seaweed, a series of floating plastic fronds anchored to a sand-filled tube, to capture sand that drifts down the coast each year, thereby building a sandy beach in front of the Depot Hill cliffs.

The alternative, discussed over the last decade, is a wall of granite boulders (rip-rap) in front of the 1,200 foot long cliff face. The price for that scheme is estimated at more than \$1 million.

The artificial seaweed has been used in Long Beach to successfully restore a badly eroded beach and has been tried in the Cape Hatteras area of the Atlantic seaboard.

The Long Beach installation is somewhat protected behind the Los Angeles breakwater and doesn't receive the full impact of winter storms.

The Capitola installation, Tupper told the council last Thursday night, will be subject to an average of 72 days of six foot high waves. Waves of that size, she said, could scatter the seaweed along the coastline.

"There has never been a beach there (in front of the Depot Hill cliffs)," Tupper said.

"The concern I have," she added, "is that the beach will be eaten away. The beach might stay there but there is a real possibility that it won't.

"Do you want to go along with a risky project and continuing spending money," she asked.

"The \$120,000 would put in 120 feet of rip-rap that would be a more permanent solution," Tupper added.

She warned that the council may face some political repercussions from the Depot Hill residents if the project fails.

"The residents are viewing it as a permanent solution to their problem (of cliff erosion) and it has to be viewed at this point has a fairly short term solution."

Four of the five councilmen supported a motion by Councilman Jerry Clarke to go ahead with the installation project.

The dissenter was Councilman Dennis Beltram, who picked up on Tupper's warning.

"There is a good chance that it won't work," Beltram said. A \$ 100,000 gamble is not an acceptable risk. I just don't see it. The gamble is too high."

Beltram reiterated fears that the installation will rob sand from New Brighton Beach State Park.

"All things considered," he concluded, "I just don't see it."

Mayor Ron Graves took exception to Beltram's remarks about the New Brighton Beach



PHOTO BY BOB SMITH

Eroded cliffside and once-buried pillars, now exposed, are problems Capitola hopes to help solve with artificial seaweed

sand loss.

"I don't think there will be any appreciable loss (of sand) once the beach is charged (built up) behind the seaweed.

"I would be the first to admit it would be a bad gamble if we lose \$120,000 but I would like to give it a start," Graves added.

"It's courageous of the council to take the risk," Beltram countered, "but judging from Susan's (Tupper) report, what are the odds of success. They don't look good. "What are we operating on? The hope we are right?"

"I think we are throwing away a significant amount of money," Beltram added.

"It is not significant when you consider the alternatives (rip-rap) to protect that cliff," Councilman Michael Routh told Beltram.

"Are you suggesting a do-nothing approach," Routh asked Beltram.

"Maybe I am," Beltram replied. "Rip-rap is not an alternative. Maybe we are beating our heads against a very high cliff."